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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION 1	۷0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/007,734		11/09/2001	Yaochu Jin	6445	4963	
758	759	06/17/2004		EXAMINER		
	FENWICK & WEST LLP				DAVIS, GEORGE B	
	SILICON VALLEY CENTER 801 CALIFORNIA STREET				PAPER NUMBER	
MOUNT	'AIN VI	EW, CA 94041		2121	b	
				DATE MAILED: 06/17/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—  Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE		10/00773	4 Tinetol	
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This action is FINAL.     Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213.    Disposition of Claims   is/are pending in the application.     Claim(s)   is/are withdrawn from consideration.     Claim(s)   is/are allowed.     Claim(s)   is/are rejected.     Claim(s)   is/are objected to.     Claim(s)   are subject to restriction or election requirement.     Application Papers   See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.     The proposed drawing correction, filed on   is/are objected to by the Examiner.     The drawing(s) filed on   is/are objected to by the Examiner.     The oath or declaration is objected to by the Examiner.     The oath or declaration is objected to by the Examiner.     Priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 110 (a)-(d).     Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 110 (a)-(d).     Acknowledgment is made of a claim for	Responsive to communication(s) filed on AWCV	idment I	1/ed 11/9/01	
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\*U.S. GPO: 1997-433-221/62717

Part of Paper No.\_

Art Unit: 2121

#### **DETAILED ACTION**

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# Specification

1. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

## **Arrangement of the Specification**

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- © Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CAR 1.96).
- (e) Background of the Invention.
  - 1. Field of the Invention.
  - 2. Description of the Related Art including information disclosed under 37 CAR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (I) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing (see 37 CAR 1.821-1.825).

# 2. Content of Specification

(a) <u>Title of the Invention</u>: See 37 CAR 1.72(a). The title of the invention should be placed at the top of the first page of the specification. It should be brief but technically accurate and descriptive, preferably from two to seven words.

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- (b) <u>Cross-References to Related Applications</u>: See 37 CAR 1.78 and MPEP § 201.11.
- © Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Reference to a "Microfiche Appendix": See 37CFR 1.96© and MPEP § 608.05. The total number of microfiche and the total number frames should be specified.
- (e) <u>Background of the Invention</u>: The specification should set forth the Background of the Invention in two parts:
  - (1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) <u>Description of the Related Art</u>: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) <u>Brief Summary of the Invention</u>: A brief summary or general statement of the invention as set forth in 37 CAR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) <u>Brief Description of the Several Views of the Drawing(s)</u>: A reference to and brief description of the drawing(s) as set forth in 37 CAR 1.74.
- (h) <u>Detailed Description of the Invention</u>: A description of the preferred embodiment(s) of the invention as required in 37 CAR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. This item may also be titled "Best Mode for Carrying Out the

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Invention." Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (I) <u>Claim or Claims</u>: See 37 CAR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet. (37 CAR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps.
- (j) <u>Abstract of the Disclosure</u>: A brief narrative of the disclosure as a whole in a single paragraph of 250 words or less on a separate sheet following the claims.
- (k) <u>Drawings</u>: See 37 CAR 1.81, 1.83-1.85, and MPEP § 608.02.
- (l) <u>Sequence Listing</u>: See 37 CAR 1.821-1.825.

#### **Drawings**

3. The drawings are objected to because Figure 1 should be labeled as Prior Art and Figure 3, words "Yes" and "No" should be added at S12 and S13. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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### Claim Objections

4. Claim 11 is objected to because of the following informalities: claim 1 should be replaced by the actual items of claim 1. Appropriate correction is required.

## Claim Rejections - 35 U.S.C. § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 11 recite a computer program which render the claimed invention a non-statutory claimed invention.

## Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Koza et al, U.S.

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As per claim 1, Koza discloses setting up the initial population as parents (abstract and figure 3A), reproducing the parents to create a plurality pf offsprings (abstract and figure 3A), evaluating the quality of the offsprings by a means of fitness function (abstract and figure 3A) and selecting at least one offsprings having the highest evaluating quality value as parents (abstract and figure 3A).

As per claim 2-11 Koza also taught the items steps discloses in these claims (see figure 3A, abstract and columns 22 and 23).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Davis whose telephone number is (703) 305-3891. The examiner can normally be reached on Monday through Thursday from 8:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (703) 308-3179. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

June 12, 2004

GEORGE B. DAVIS

PRIMARY PATENT EXAMINER